Blood Lead Surveillance Update/ Data Modernization Initiative

LEPAC Meeting • October 16, 2023

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BLOOD LEAD SURVEILLANCE UPDATE

Childhood Blood Lead Surveillance System (CBLS)

- Child-specific database (age <16 years) of blood lead testing data

- Data from all CDC-funded Childhood Lead Poisoning Prevention Programs (CLPPPs)

- Integrates clinical information, laboratory reporting, and environmental investigation data

We are currently processing and analyzing recent years of submitted CBLS data

- CDC provided 2017–2021 data tables to states in May 2023 for approval of the numbers to be published online

- Various challenges have delayed the final publication of these data

  - Complexities of datasets, data formatting, and submission processes

  - Delays in some states adapting to the new data elements and systems

  - Differences between state surveillance systems and the way they count and produce data

We explored the impact of the COVID-19 pandemic and LeadCare II recall on blood lead testing among children

Blood lead tests per quarter in 25 states
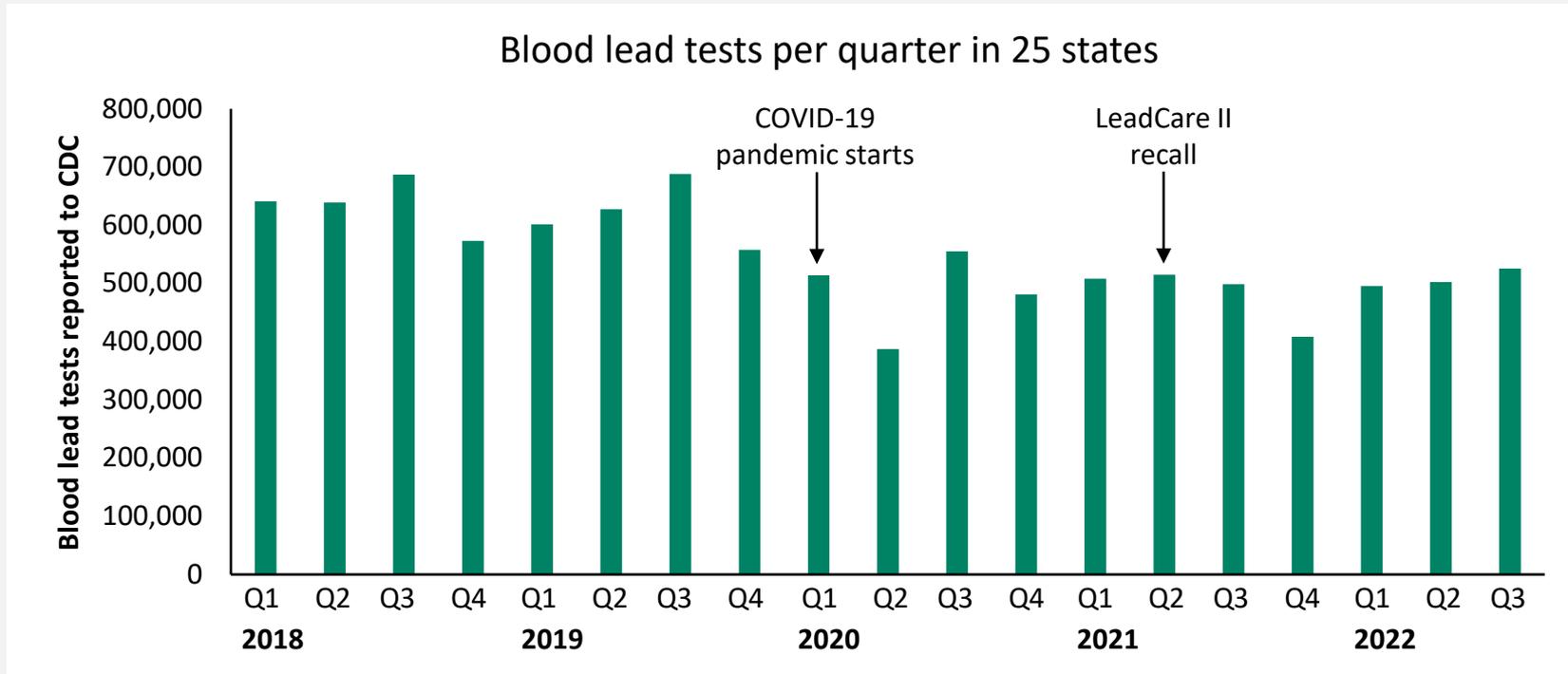
We are assessing new data sources for blood lead surveillance to complement CBLS data
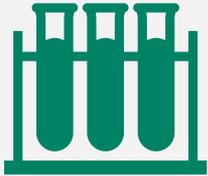
Large clinical lab database
National near real-time testing data from adults and children

Centers for Medicare & Medicaid Services
Data on blood lead testing among children enrolled in Medicaid

Lead Exposure Risk Index (LERI)
Estimate of national and state lead exposure risk for children

DATA MODERNIZATION INITIATIVE

Background: Childhood Blood Lead Surveillance (CBLS) Modernization

THE SYSTEM

- Integrates collected laboratory and patient data

- Applies nationally consistent standards

- Tracks progress towards the elimination of childhood lead poisoning

THE CHALLENGE

- Lack of resubmission tracking mechanism

- Labor intensive, manual data review process

- Manual process to facilitate essential data linkages

- Partners with dynamic, diverse operating and technical environments

Proposed Approach

- Utilize shared Cloud-based services

- Integrate within the CDC standard cloud-based infrastructure

- Support state, tribal, local, and territorial staff and programs

Key Changes

Unified Data Storage

Automated Data Pipelines

Shared Data and Analytics

Efficient Reporting

Questions?

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